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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,416	09/24/2004	Josef Lauter	DE 020075	1931
24737 7590 11/20/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
MALAMUD, DEBORAH LESLIE				
ART UNIT		PAPER NUMBER		
3766				
MAIL DATE		DELIVERY MODE		
11/20/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,416

Applicant(s)

LAUTER ET AL.

Examiner

DEBORAH MALAMUD

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 11-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 22 July 2009 and 02 October 2009 have been entered.
2. Claims 11-20 are withdrawn; new claims 21-30 are entered; claims 1-10 and 21-30 are pending.

Election/Restrictions

3. Newly submitted claims 21-30 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: these claims pertain to subject matter that was already withdrawn due to a restriction presented in a previous Office Action. See the Final Office Action mailed 11 April 2008.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

4. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Golasarsky et al (U.S. 5,891,044). Golasarsky discloses (col. 2, lines 32-35) detecting the time interval between heart beats, SOS (start of systole), which is "essentially equal to the Time Interval between RR peaks in an electrocardiogram (ECG)." Golasarsky further discloses (col. 6, line 60-col. 7, line 12) "detecting abnormal heart rate variability comprising: A) first recording a first subject's instantaneous heart rate or RR intervals over substantially no less than 50 to substantially no more than 300 heart beat segments occurring with normal heart rate variability; B) characterizing the sharpness of histograms of said segments comprising the numbers of each of the heart rate or RR intervals recorded versus each particular heart rate or RR interval as a function of the Mode of each of the segments; C) second recording a second subject's heart rate or RR intervals over substantially no less than 50 to substantially no more than 300 heart beat segments; D) characterizing the sharpness of the histograms of the second subject's

heart rate or RR interval variations as a function of the Mode of each of the segments; and E) indicating when the sharpness of the histograms of the second subject deviates from predetermined limits derived from the histograms of the first subject.” The Examiner considers this to disclose the use of ECG sensors to obtain patient heart data, conditioning and interpreting circuitry (82 and 300); histogram analysis and a real time evaluator. Golasarsky discloses ALARM signals (col. 3, lines 58-61 and col. 4, lines 15-18) “when no pulse is detected for ten or more seconds and the galvanic, skin response sensor indicates the ECC electrodes or the pulse sensor is in contact with the user” (ALARM 2) and “If no Time Intervals are detected for 15 or more seconds and the galvanic skin response sensor indicates the ECG electrodes or the pulse sensor is in contact with the user” (Cardiac Arrest ALARM). The Examiner considers this to satisfy the claimed requirements of an alarm generator that generates an alarm based on the analysis of the histogram when a pre-determined value of the interval corresponding to an alarm-relevant classification is detected. It is noted that, as the system detects successive RR intervals of an ECG signal, this indeed constitutes a temporal interval between characteristics peaks in an ECG spectrum during a plurality of successive heart cycles. The histogram as noted above reflects the temporal distribution of these values as claimed.

7. Regarding claims 2 and 7, Golasarsky further teaches an RF link (col. 14, lines 36-47) and a motion sensor (col. 8, lines 14-20).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-6 and 8-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Golasarsky et al (U.S. 5,891,044). The Examiner considers the watchband as disclosed by Golasarsky to be an elastic belt, since a watchband contains an adjustable buckle for affixing around the circumference of the body in a similar manner to a belt. In the alternative, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the watchband as taught by Golasarsky, with the belt as required by the claim, because the applicant has not disclosed the use of a belt provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the applicant's invention to perform equally well with the watchband sensing system as taught by Golasarsky, because it is able to be securely yet removable affixed to a patient, making contact with the patient's body in order to gather physiological data as required by the claims. Therefore, it would have been an obvious matter of design choice to modify Golasarsky's system to obtain the invention as specified in the claims.

10. Regarding claim 9, the Examiner considers the Cardiac Arrest alarm as cited above to satisfy the claim requirements.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBORAH MALAMUD whose telephone number is (571)272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571) 272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/
Supervisory Patent Examiner, Art Unit 3766

/Deborah L. Malamud/
Examiner, Art Unit 3766